DIAGNOSES

OF

NEW SPECIES OF TERRESTRIAL AND FLUVIATILE SHELLS

FROM

BRITISH EAST AFRICA AND UGANDA

BY

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(With Plate XVII.)

Streptostele exasperata, sp. n. — Pl. XVII, fig. 11.

Shell subulately fusiform, moderately solid, shining, wax-coloured; whorls 10-11, flattish, the earlier whorls nearly smooth, the remainder sculptured with regular, closely set, somewhat fine, transverse costulae; suture impressed; columella thickened, whitish, outwardly expanded, almost vertically descending; labrum thickened, scarcely reflexed, slightly receding above; aperture very irregularly subquadrate.

Alt. 11, diam. maj. 3 mm.

Aperture : alt. 2.25. diam. 1 mm.

Hab. — Mount Kenia at an altitude of from 6-9000 ft (ROBIN KEMP).

Streptostele polymorpha, sp. n. – Pl. XVII, fig. 14.

Shell rimate, subulately fusiform, cream coloured; whorls δ^{x}_{2} , flattish, the first two and a half smooth, the remainder sculptured with rather coarse and slightly distant, transverse costulae; suture impressed; umbilicus narrow, concealed in front by the outward expansion of the columella; columella

obliquely descending, outwardly thickened and broadly expanded, diffused above into a thickish, well defined, rather broad callus which reaches the upper margin of the labrum; labrum white, polished, thickened and rather narrowly reflexed, receding above to form a shallow sinus; aperture irregularly subtruncate.

Alt. 7.25, diam. maj. 2.25 mm. Aperture : alt. 1.25, diam. 1 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

A number of specimens were collected which appear to show considerable variation, though with careful comparison, it is possible to graduate them all into one species.

Trachycystis nigrotincta, sp. n. – Pl. XVII, fig. 9.

Shell allied to I. *fusco-olivacea* $\binom{x}{}$, SMITH from Nyassaland, but much darker in colour, the present species being almost black, it has also a rather more elevated spire and possesses half a whorl more, it is also more coarsely and sparcely hispid.

Alt. 5, diam. maj. 7.5, diam. min. 6.5 mm. Aperture : alt. 3.5, diam. 3.5 mm.

Hab. — Between Mount Kenia and Eusso Nyiro, British East Africa (ROBIN KEMP).

? Buliminus ugandae, sp. n. — Pl. XVII, fig. 13.

Shell thin, rimate, acutely turbinate, polished, shining, olive brown; whorls 6, rapidly increasing, convex, marked with coarse, oblique growth lines; suture deeply impressed; perforation very narrow, almost concealed by the outward expansion of the columella; columella vertically descending, outwardly expanded; labrum simple; aperture ovate.

Alt 9, diam. maj. 5.5, diam. min. 4 75 mm.

Aperture : alt. 4.25, diam. 2.75 mm.

Hab. -- Between Entebbe and Mbarara, S. W. Uganda (ROBIN Kemp).

⁽¹⁾ Proc. Zool. Soc., London, 1899, p. 585.

Subulina Kempi, sp. n. - Pl. XVII, fig. 15.

Shell subulate with obtuse apex, thin, semitransparent, polished, shining, pale straw color; whorls 6, smooth, slightly convex, rather rapidly increasing, the last very long; suture impressed; columella del, descending in a curve, obliquely truncate below; labrum thin, receding at the base; aperture elongately ovate.

Alt. 6.75, diam. maj. 2 mm.

Aperture : alt. 1.5, diam. 75 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

Homorus foveolatus, sp. n. - Pl. XVII, fig. 17.

Shell fusiform, polished, shining, rich yellowish brown; whorls $6^{t}/_{2}$, the last very long; marked with oblique, transverse striae which are more noticeable on the upper whorls and gradually become obsolete below; suture impressed, narrowly margined below; columella rather sharply curved and obliquely truncate; labrum simple, receding towards the base, bent slightly inwards over the aperture above; aperture rather elongately, inversely auriform.

Alt. 17.75, diam. maj. 7 mm. Aperture : alt. 7, diam. 3.5 mm.

Hab. — Mount Kenangop, Aberdare Range, British East Africa (ROBIN KEMP).

Homorus kenangopensis, sp. n. - Pl. XVII, fig. 16.

Shell differing from H. foveolatus in its shorter and more ovate form, lighter colour and straighter columella which is diffused outwards and above into a whitish callus.

Alt. 15, diam. maj. (nearly) 7 mm. Aperture : alt. 7.25, diam. 3.25 mm.

Hab. — Mount Kenangop, Aberdare Range, British East Africa (ROBIN KEMP).

Curvella entebbeensis, sp. n. - Pl. XVII, fig. 5.

Shell imperforate, fusiformly turbinate with obtuse apex, thin, vitreous, polished, shining, pale greenish white; whorls 5, the last proportionately

rather long, sculptured with rather fine, distant, arcuate, transverse costulae; suture impressed; columella strongly twisted, diffused above into a moderately thin, well defined, cream coloured callus which reaches the upper margin of the labrum; labrum acute, projecting in front, slightly receding below, rapidly receding above to form a broad, triangular sinus; aperture elongately inversely auriform.

Alt. 7.75, diam. maj. 4 mm. Aperture : alt. 4, diam. 2 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

Curvella mbararaensis, sp: n. - Pl. XVII, fig. 6.

Shell small, scarcely rimate, fusiform with obtuse apex, cream coloured; whorls $4^{-1}/_{2}$, convex, the last long, sculptured throughout with transverse, arcuate riblets; columella vertically descending above, somewhat twisted and much excavated below, rather outwardly reflexed; labrum simple, acute; aperture rather curvedly and elongately inversely auriform

Alt. 6, diam. maj. 3 mm.

Aperture : alt. 2.25, diam. 1.25 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

Curvella solidula, sp. n. — Pl. XVII, fig. 12.

Shell perforate, turbinately fusiform, solid, cream coloured, very slightly shining; whorls 6, rapidly increasing, the last inflated, marked with very coarse, closely set, transverse, arcuate riblets which become straighter and almost obsolete on the lower half of the last whorl; suture impressed, somewhat crenellated by the terminations of the transverse riblets; umbilicus rather wide and deep; columella very slightly oblique, thickened, reflexed, diffused above into a barely perceptible callus which joins the upper margin of the labrum; labrum acute, reflexed, erect above, receding towards the upper margin; aperture inversely auriform.

Alt. 10.25, diam. maj. 6, diam. min. 5 mm. Aperture : alt. 5.75, diam. 2.25 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

Kenia obesa, sp. n. - Pl. XVII, fig. 18.

Shell fusiform with obtuse apex, polished, shining, pale olive; whorls 6, the last three rather rapidly increasing, marked with indistinct, transverse growth lines; suture lightly impressed, narrowly margined below; columella thickened, descending in a curve, obtusely truncate below, diffused above into a narrow, restricted, thin but well defined callus which reaches the upper margin of the labrum; labrum thin, acute, receding below; aperture rather elongately, inversely auriform.

Alt. 15 75, diam. maj. 6 mm.

Aperture : alt 6 25, diam 3 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

Distinguished from other members of the groop by its broad and proportionately short form.

Succinea eussoensis, sp. n. – Pl. XVII, fig. 7.

Shell elongately ovate with somewhat exserted spire, yellowish brown; whorls 3, rapidly increasing, the last two rather convex below, marked with lines of growth: suture well impressed; columella descending obliquely; labrum simple; aperture ovate.

Alt. 7.5, diam. maj. 4.75, diam. min. 3 mm. Aperture : alt. 4.75, diam. 2.75 mm.

Hab. — Chanler Falls, Éusso Nyiro, British East Africa (ROBIN KEMP).

Succinea simplicissima, sp. n. - Pl. XVII, fig. 4.

Shell almost rectangular, very thin, semitransparent, whitish; whorls $2^{t}/_{4}$, very rapidly increasing, the earlier whorl and a quarter minute, the last very long; columella descending obliquely, somewhat outwardly bulging above, curvedly excavated below; labrum simple, bent slightly inwards over the aperture near its point of insertion with the parietal wall; aperture ovate, dilated below, contracted above.

Alt. 9, diam maj. 4.75, diam. min. 3 mm. Aperture : alt. 7, diam. 4 mm.

Hab. — Chanler Falls, Eusso Nyiro, British East Africa (ROBIN KEMP).

Planorbis kisumiensis, sp. n. - Pl. XVII, fig. 10.

Shell small, suborbicular, depressed with concave spire, reddish brown; whorls 3, sculptured with very oblique, arcuate, transverse growth striae and microscopic, punctate, spiral striae; suture rather deeply impressed; umbilicus very wide, shallow; labrum acute, greatly receding below, projecting in front. the margin somewhat converging; aperture compressedly sublunate.

Alt. 1.25, diam. maj. 3.25, diam. min. 2.75 mm.

Hab. — Kisumi, Lake Victoria Nyanza, British East Africa (ROBIN KEMP).

Physa permembranacea, sp. n. - Pl. XVII, fig. 8.

Shell perforate, ovate, very thin, shining, reddish brown; whorls 4, rapidly increasing, the last large, moderately inflated, marked with vertical, transverse growth lines crossed by microscopic, closely set, spiral, scratch-like striae; suture impressed; columella descending in a curve, outwardly expanded over the narrow umbilicus and diffused above into a thin, red, well defined, parietal callus which reaches the margin of the labrum; umbilicus narrow; labrum thin, erect, membranaceous; aperture large, broadly inversely auriform.

Alt. 9, diam maj. 5.5, diam. min. 4.75 mm. Aperture : alt. 6, diam. 3 mm.

Hab. Abedare Range, British East Africa (ROBIN KEMP).

The extremely thin membranaceous texture of the shell is the chief character of the species, in many examples when the animal is removed, so thin is the test, that it can be pressed inwards and dented at will.

Sphaerium congener, sp. n. — Pl. XVII, 2.

Shell closely allied to *S. victoriæ* SMITH (¹), but differing from that species in its lighter colour, considerably coarser concentric striae and more compressed sides

Long. 6.5, lat. 8 mm.

Hab. — Between Entebbe and Mbarara, S. W. Uganda (ROBIN KEMP).

⁽¹⁾ Proc. Zool. Soc., 1906, p. 186, pl. X, fig. 16.

Sphaerium Iredatei, sp. n. - Pl. XVII, fig. 3.

Shell roundly ovate, moderately convex, olive green, both valves sculptured with rather fine, closely set, concentric ridges; umbones somewhat large, not prominent; dorsal margin arched; ventral margin very gently rounded; anterior side sloping above, rounded below; posterior side abruptly descending; anterior lateral teeth in both valves strong, sloping abruptly downwards and then curving upwards again to the margin of the shell; posterior lateral teeth stroug in both valves, only very slightly curving downwards and upwards, rather sinuous; interior of shell white towards the umbonal region, ashen grey, spotted and blotched with white below.

Long. 6.5, lat. 8.75 mm.

Hab. — Kisumi, Lake Victoria Nyanza, British East Africa (ROBIN KEMP).

Sphaerium naivashaense, sp. n. – Pl. XVII, fig. 1.

Shell ovate, thin, glossy, yellowish brown, both valves rather indistinctly and distantly, concentrically striate; umbones large, somewhat flattened; dorsal margin sloping on either side; ventral margin anteriorly rounded; anterior side abruptly descending in a slight curve; posterior side somewhat produced, rounded; anterior and posterior lateral teeth in both valves weak, curving round the margin of the shell, but not sloping upwards or downwards; muscular scars in both valves well marked; interior of shell pale livid flesh colour.

Long. 7.25, lat. 9 mm.

Hab. — Lake Naivasha, British East Africa (ROBIN KEMP).
